

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 80527-2400



10822064 - GAUFW

PATENT APPLICATION

ATTORNEY DOCKET NO. 200312670-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Neal W. Meyer et al

Confirmation No.: 2065

Application No.: 10/822064

Examiner: unassigned

Filing Date: Apr 08, 2004

Group Art Unit:

Title: Bonding An Interconnect To A Circuit Device And Related Devices

Mail Stop Amendment
Commissioner For Patents
PO Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97 (b), or
(Within three months of filing national application; or date of entry of national application; or before mailing date of first action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97 (c), together with either a:
☐ Statement under 37 CFR 1.97 (e), or
☐ a \$180 fee under 37 CFR 1.17 (p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d), together with either a:
☐ Statement under 37 CFR 1.97 (e)(1) or (2), and
☐ a \$180 fee set forth in 37 CFR 1.17 (p)
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account 08-2025 the sum of \$ 0.00 . At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25.

Applicant(s) submit herewith form PTO 1449 - Information Disclosure Statement together with any required copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

- ☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an english language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed.

It is requested that the information disclosed herein be made of record in this application.

- ☒ I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:
Commissioner for Patents, Alexandria, VA 22313-1450

Date of Deposit: 1/5/06
OR

- ☐ I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number (571) 273-8300
Date of facsimile:

Typed Name: Donald J. Coulman

Signature:

Respectfully submitted,

Neal W. Meyer et al

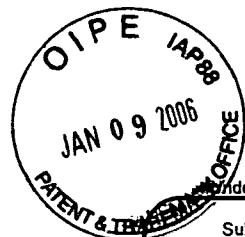
By
Donald J. Coulman

Attorney/Agent for Applicant(s)

Reg No. : 50,406

Date : 1/5/06

Telephone : 541 715 1694



10822064 - GAU:

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

Application Number	10/822064
Filing Date	Apr 8, 2004
First Named Inventor	Neal W. Meyer
Art Unit	
Examiner Name	unassigned
Attorney Docket Number	200312670-1

Sheet 1 of 2

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
/RC/		US- 2003/016503	01-23-2003	Gerd	
↓		US- 5,233,134	08-03-1993	Hirai	
		US- 2003/042587	03-06-2003	Tsung-Jen	
/RC/		US- 6,054,371	04-25-2000	Tsuchiaki	
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

Examiner
Signature

/Rick Chang/

Date
Considered

11/25/2007

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /RC/

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/822064
		Filing Date	Apr 8, 2004
		First Named Inventor	Neal W. Meyer
		Art Unit	
		Examiner Name	unassigned
Sheet 2	of 2	Attorney Docket Number	200312670-1

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
/RC/		SHIGETOU, "Room temperature direct bonding of CMP-Cu film for bumpless interconnection", Electronic Components & Tech Conf, May 29, 2001, pgs 755-760.	
/RC/		SUGA, "Bump-less interconnect for next generation system packaging", Electronic Components & Tech Conf, May 29, 2001, pgs 1003-1008.	
/RC/		SUGA, "Surface activated bonding for new flip chip and bumpless interconnect systems", Electronic Components & Tech Conf, May 29, 2001, pgs 105-111.	

Examiner Signature	/Rick Chang/	Date Considered	11/25/2007
--------------------	--------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /RC/